

AMENDMENTS TO THE SPECIFICATION

Page 1, before the phrase "BACKGROUND OF THE INVENTION", insert the following as a new paragraph - - This is a continuation of Application No. 09/804,245, filed March 13, 2001, now allowed which is a continuation of Application No. 09/085,864, filed May 28, 1998, entitled "FIBER CHANNEL CONNECTION STORAGE CONTROLLER," by Akemi Sanada et al. - -

Please replace the paragraph beginning at page 3, line 3, with the following rewritten paragraph:

- - However, the ANSI X3T11-standardized fiber channel is the "network type" architecture, which is capable of providing the host logical layer with various built-in layers mountable thereon, such as for example TCP/IP, SCSI, ESCON, IPI and the like. More specifically, since the buffer contents are to be moved from one device to another in a way independent of the data format and contents, it may offer logical compatibility with other interface configurations and therefore remains physically accessible without suffering from any particular limitations. Especially, in a storage system including this fiber channel and a storage device with a plurality of storage regions such as a disk array device or "subsystem," the storage regions are usable in common by an increased number of host computers. Accordingly, the prior art unauthorized access deterrent schemes remain insufficient in performance and reliability. A need thus exists for achievement of secrecy protection based on users' intentional security setup. - -

Please replace the paragraph beginning at page 9, line 11, with the following rewritten paragraph:

- - In addition, it becomes possible to precisely managing those access attempts from any one of the host computers in a one-to-one correspondence manner among the host computers and storage controller ports as well as storage regions; accordingly, the

storage device may be efficiently utilized to meet the needs upon alteration of the usage per storage region. - -

Please replace the paragraph beginning at page 12, line 22, with the following rewritten paragraph:

- - Numeral 50 is the disk array subsystem operable under control of the storage controller 40. The disk array subsystem 50 is a device that stores therein data of host computers, which may be arranged to includes therein a plurality of individual separate disks as disposed to have certain redundancy. - -

Please replace the paragraph at page 17, line 24, through page 18, line 5, with the following rewritten paragraph:

- - The frame header 72 has a format 80 as shown in Fig. 3. In the frame header format 80, a destination identifier (D_ID) 81 is an address identifier on the frame reception side, and a source identifier (S_ID) 82 is an identifier indicative of the N_Port address on the frame transfer side, each of which may involve N_Port_ID, N_Port_Name information, etc. - -

Please replace the paragraph beginning at page 21, line 4, with the following rewritten paragraph:

- - At sequence 112, the device sends the host computer an FCP transfer ready (FCP_XFER_RDY) frame thereby notifying it of completion of preparation for data transmission. The host computer then sends the ACK frame to the device. - -

Please replace the paragraph beginning at page 22, line 7, with the following rewritten paragraph:

- - Lastly at sequence 124, the device sends the host computer an FCP response (FCP_RSP) frame thereby notifying it of successful completion of data reception concerned. The host computer then sends ACK frame to the device. - -

Please replace the paragraph at page 31, line 21, through page 32, line 6, with the following rewritten paragraph:

- - Assume that those media 152, 153, 154 are accessible from the host computer 10 whereas media 155, 156 are accessible from host computer 20. Suppose that the N_Port_Name information of host computer 10 is HOSTA, that of host computer 20 is HOSTB. Suppose also that the port of storage controller 40 is CTL0P0, that of optical disk drive 151 is DRIVE0, and those of respective media 152, 153, 154, 155 and 156 are MEDA, MEDB, MEDC, MEDD and MEDE. In this case, a request control table 160 is as shown in Fig. 11. - -